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RESOURCES AND TECHNOLOGY DIVISION

6 March 1975
102000-32-L

Mapping Exposed Silicate Rock Types and Exposed Ferric and Ferrous Compounds from a Space Platform

Quarterly Report for Period 8 September 1974 - 8 December 1974

EREP Investigation 444M
NASA Contract NAS9-13317

Prepared by

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The following report serves as the seventh quarterly report for this contract, which is entitled "Mapping Exposed Silicate Rock Types and Exposed Ferric and Ferrous Compounds from a Space Platform." The financial reports have been submitted monthly under separate cover.

PROGRESS

A program has been completed in Fortran IV for use on the IBM 370/168, enabling us to read S-191 data tapes. The data is output in a format suitable for use in a series of programs that calculate radiances for different spectral bands. These band radiances can then be compared with similar band radiances calculated using laboratory curves and also with band radiances from specific instruments, i.e., ERTS MSS, S-192, etc., the program operates directly off the tapes and is in conversational mode. The user can pick specific curves off of the input tapes by merely specifying the time of collection of the desired curves. At present, allowing the program to run in automatic mode will result in only the first curve of each data record being read, i.e., 1 out of every 4 curves. Output consists of printed output, wavelengths and reflectances, in easy to read format, as well as the necessary format for insertion into other programs. Output in this second format is put into a file which can then be listed on the printer, punched out onto cards, or used directly as input into the next program.

PLANS

S-192 data has been received and processing will begin in the next quarter. Plans are to produce maps of S-192 data for geologic interpretation and also to compare S-191 data to laboratory spectra of geologic materials.

TRAVEL

None

Respectfully submitted:

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